

DETAILED ACTION

1. This action is responsive to amendment filed February 21, 2008.
2. Claims 1-36 remain pending. Claims 1, 13, 25, 26 and 37 are independent claims.

Response to Amendment

3. Per Applicant's request, Claim 1 has been amended and new claims 37-41 have been added.

Response to Arguments

4. Applicant's arguments have been fully considered but they are not persuasive. The following is an examiner's response to Applicant's arguments.

Applicant's Arguments:

Regarding the Rejection under 35 U.S.C. §112, second paragraph

Applicant respectfully traverses the rejection based upon the contention by the Patent Office that the claims are indefinite. The reason for this rejection, as asserted in the Office Action, is that the "threshold" is indefinite for failure for one of ordinary skill in the art to ascertain the metes and bounds of the claimed threshold. Applicant submits that this simply is not the case.

The Examiner's attention is directed to the text spanning pages 4 and 5 of the specification which are reproduced below:

"...The present invention seeks to improve performance in a large bitmap image scenario by utilizing an analog signal path to transmit analog images rather than digital bitmap images when the bitmap image size exceeds a threshold. An appropriate threshold, can be readily determined experimentally, for example, to be a bitmap size that results in noticeable delays in display of the digital image. However, this is not to be considered limiting since other systems may deviate from this particular threshold without departing from the present invention.

An example of the type of scenario wherein transfer of large:bitmap images can produce poor performance is in the case where on-screen data (OSD) representing a program guide is being delivered from a television set-top box to a digital television. In this situation, the OSD can represent a large bitmap image which transfers very slowly between the set-top box and the digital television, and thus creates a scenario wherein the user must endure delays awaiting completion of the data transfer." (emphasis added).

Hence, the Applicant has explained by way of explicit teachings and by way of examples that 1) the image in question is a digital bitmap image (this is explicitly claimed, so other image types are irrelevant); 2) the threshold can be set to improve performance; 3) the threshold can be set to approximately a size that corresponds to a size where noticeable delays in display of the digital image would occur, 4) an example of the problem can occur when an OSD representing a program guide is to be displayed (generally defining a representatively large data transfer of a bitmap image), 5) in this illustrative example, the user must endure such delays in the absence of the claimed invention, and 6) that an appropriate threshold can be readily determined experimentally for any given system so that such delays are minimized or data transfer performance is improved. The parameters of the problem to be solved and applied to determining such a threshold are clearly laid out such that minimal experimentation by one of ordinary skill in the art can be used to arrive at a solution for a given system.

Art Unit: 2623

It will be readily appreciated by one skilled in the art that the exact value of the threshold in any given system may vary depending upon a number of factors such as: available processing speed, number of pixels and color depth of the bitmap graphic, resolution of the display system, time required to switch to an analog input, time to convert to an analog signal, etc. Accordingly, it is abundantly clear that establishing a "one size fits all" threshold number is not appropriate and is unduly restrictive of the claims. The claims as presented are clear and readily understood by those skilled in the relevant art. One of ordinary skill in the art would understand that such factors are relevant; but, even if he or she did not understand any of the relevant factors, any engineer seeking to solve the problem could arrive at a suitable threshold by simple trial and error while observing the effect of each trial on delay time to display the image. Once one determines that the delay problem can be solved by use of an analog transmission of the image, the determination of a suitable threshold is submitted to be easy.

The Office Action further poses the question "what if the threshold is set to such a high number that no conversion is necessary and thus no converting step at all and the invention is now only a one-step process which is the step of sending the analog image to the consumer device via the analog interface. In such a case then, what would be the novelty of the invention." The undersigned respectfully submits that the Office Action's posed question almost answers itself.* Clearly such a threshold is too high, and one of ordinary skill in the art would know so and not choose such a threshold! Clearly choosing such a threshold is inconsistent with the teachings of the specification. The CAFC addressed a similar issue in Exxon Research & Eng'g Co. v. United States, 265, F.3d. 1371, 60 USPQ2d, 1272 (Fed. Cir. 2001) when it stated that "[a] patent claim to a fishing pole would not be invalid on indefiniteness grounds if it contained a limitation requiring that the pole be 'at least three feet long' even though a 50-foot-long fishing pole would not be very practical [T]here is nothing indefinite about the claim language at issue in this case simply because it covers some embodiments that may be inoperable."

Moreover, while Applicant has stated that a threshold can be determined to 1) improve performance, or 2) to avoid noticeable delays. Thus, determination of an appropriate threshold can be determined by experimentation, there is no evidence of record that an undue amount of experimentation is necessary, and Applicant submits that the amount of experimentation needed for a particular embodiment is in fact quite reasonable and can be determined quite systematically by one having ordinary skills in the art. As noted in the Office Action, if the threshold is too large, the remaining claim acts will not be carried out. Hence, the upper boundary is quite clear. The lower end of the boundary is clearly based upon the tradeoff between improving performance or encountering a noticeable delay and any other disadvantages of displaying using an analog rather than a digital interface for a given system. In the event of no perceived disadvantages, the threshold could be quite low, but would be dependent upon the design tradeoffs of a particular embodiment. Yet, the claims as presented clearly call for a definite process that would be readily understood by one of ordinary skill in the art.

Furthermore, while determining such a threshold value can be accomplished experimentally in a systematic way with minimal effort, there is no single number that is absolutely appropriate for a given system. Hence, the guidance given in the specification is fully adequate to enable one skilled in the art to determine an appropriate threshold. Reconsideration and removal of the rejection based upon indefiniteness is respectfully requested.

In order to even further support Applicant's position in this matter, the Declaration of Narayan Pursaud Jr. (Declarant) is submitted herewith supporting the position that the specification adequately discloses the meaning of the term such that the claims and specification are clearly definite and enabling. It is noted that Declarant is not purported to be one of ordinary skill in the art, and in fact, Declarant admits little practical or classroom experience in the field of the present patent application. One can reasonably presume that as a yet to be degreed engineering student with one year of technical experience as a co-op student who performed testing in a field outside the area of the present technology, and having no significant classroom or practical experience in the field of the claimed invention, the Declarant can in fact be reasonably considered to be well below the level of ordinary skill in the art. Nevertheless, he declares that he could determine an appropriate threshold with only a small to moderate amount of experimentation

- certainly not an undue amount (especially considering his level of skill in the art) - after reading and studying the patent application (a task that he indicated to the undersigned took approximately one half hour). He further declares that the scenario proposed by the Examiner is inconsistent with the teachings of the patent, and that the metes and bounds of the threshold are clear to him. It is thus submitted that if the metes and bounds of the threshold appear clear to the Declarant, clearly the disclosure is enabling and the claims definite to one having ordinary skills in this technology. As noted by the Examiner in the first paragraph of page 3 of the Office Action, "the claims are to be interpreted in light of the disclosure". Hence, the present declaration and the above remarks clearly refute the Office Action's position.

Reconsideration and allowance are respectfully requested.

Examiner's response:

In response to Applicant's arguments, the examiner respectfully notes the following:

At page 8, Applicant disagrees with the examiner's position that the claimed "size threshold" is being indefinite and Applicant directs the examiner's attention to the text spanning pages 4 and 5 of Applicant's specification apparently as where a description of a size threshold may be found. The examiner has considered the cited pages and has nowhere found any specific description of a threshold. Furthermore, the examiner has found nowhere, according to Applicant's assertion at page 9 last paragraph, that "the exact value of the threshold in any given system may vary depending upon the number of factors such as: available processing speed, number of pixels and color depth of the of the bitmap graphic, resolution of the display system, time required to switch to an analog input, time to convert to an analog signal, etc."

The claimed "size threshold" is thus not clearly defined so that one skilled and/or one not skilled in the art can ascertain whether a size threshold claimed by another would infringe on Applicant's claimed threshold.

A size threshold that requires as many factors as asserted by Applicant at page 9 would necessitate an undue amount of experimentation (e.g., try a value for one of the parameters listed above and keep the value fixed and then try different combinations of the remaining parameters; and then change the value and try other combinations, etc.).

The experimentation requires intervention of a human being which could perform all or some of the steps recited in Claim 1. Thus, this method may no longer produces

results that are concrete (i.e., produces the same results every time the method is implemented) as formulated in the State Street case law.

Applicant's arguments:

Regarding the Rejections under 35 U.S.C. §103

All claims (1-36) have been rejected as obvious based upon the Japanese publications by Tesujiro in view of Shigeru with certain claims further utilizing Draft EIA-775A, DTV 1394 Interface Specification (hereinafter EIA) submitted by Applicant. Applicant respectfully requests reconsideration of all rejections in view of the following:

As noted in the prior response, and admitted in the Office Action, the claims must be given their broadest reasonable interpretation in view of the specification. Additionally, word of the explicit language of the claims taken in light of the specification must be taken in consideration.

In rejecting the claims as indefinite, which has been addressed above, the Office Action states "any arguments that this claimed threshold provides patentable distinction over the prior art will be considered unpersuasive". If Applicant understands this correctly, this means that the Examiner is in fact refusing to consider the explicit language of the claims. This is clearly improper, and the present Office Action is fatally defective on that basis alone. The Examiner's attention is directed to MPEP 2143.03 which explicitly states as follows:

"2143.03 All Claim Limitations Must Be Considered

"All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

I. INDEFINITE LIMITATIONS MUST BE CONSIDERED

A claim limitation which is considered indefinite cannot be disregarded. If a claim is subject to more than one interpretation, at least one of which would render the claim unpatentable over the prior art, the examiner should reject the claim as indefinite under 35 U.S.C. 112, second paragraph (see MPEP § 706.03(d)) and should reject the claim over the prior art based on the interpretation of the claim that renders the prior art applicable. Ex parte Ionescu, 222 USPQ 537 (Bd. Pat. App. & Inter. 1984)" (emphasis added).

Applicant therefore submits that the claims as presented MUST be considered including the features relating to the "threshold", and failure (indeed refusal!) to do so is inherently a failure to establish prima facie obviousness and is clearly improper under MPEP 2143.03 (which states that the feature must be interpreted and considered in a further rejection beyond 35 U.S.C. 112 - Not ignored!). Such is clearly the case without regard for whether the limitation is definite (as has been clearly established above). Hence, the limitation must be considered and the limitation has not been shown to be taught or suggested in any of the cited art. Moreover, no line of reasoning has been presented as to why such a feature in combination with the other claim features Should be considered obvious.

Additionally, any new rejection purporting to assert the same references cannot be considered final, since the present rejection does not simply fail to consider actual claim features, it in fact improperly refuses to consider them, and fails to establish where such claim features can be found in the cited references. This is clearly erroneous and cannot constitute a proper rejection on the merits. Reconsideration of all claims including all claim features is respectfully requested.

None of the cited art either individually or collectively teaches or suggests all features of the claims as arranged (including the threshold related features which are improperly not being considered), and none of the references taken singly or in combination are adequate to obviate the present claims. Hence, there can be no prima facie obviousness. Reconsideration and allowance of all claims are respectfully requested.

Examiner's response:

Contrary to Applicant's assertion, the examiner has considered the claimed "size threshold" but has not been able to determine with certainty what value of the threshold to use to implement the claimed method.

Furthermore, the examiner submits that Applicant's interpretation of the examiner's statement "[a]ccordingly, any arguments that this claimed threshold provides patentable distinction over the prior art will be unpersuasive" was not proper because the claimed threshold value or range of values is not clearly known and appears to vary with the equipment and conditions of use of the system (an analogy would be a moving goal post) so that it can be ascertained against the threshold value or range of values of an infringing device. In view of this indefiniteness of the claimed threshold, Applicant can always argue that the claimed threshold value is outside of the range of values disclosed by the prior art. Applicant's argument is thus not persuasive. It is further noted that Applicant's argument that the claimed limitation is ignored and not considered in the rejection of the claims under 35 U.S.C. § 103(a) as being unpatentable over Tesujiro in view of Shigeru is not proper because the Office action has clearly cited the relevant portion of Tesujiro that discloses a size threshold (see Office action).

Accordingly, the rejection of Claims 1, 11, 15, 23, 26 and 33 under 35 U.S.C. § 112, second paragraph as being indefinite and of Claims 1-36 under 35 U.S.C. § 103(a) as being unpatentable over Tesujiro in view of Shigeru is considered still proper and maintained.

Claim Rejections – 35 USC §112

5. The following is a quotation of the second paragraph of the 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 11, 15, 23, 26, 33 are rejected under 35 U.S.C. §112 , second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 11, 15, 23, 26, 33 recite the limitation “a [size] threshold,” to which that of a bitmap image is compared in order to determine the next logical step in the process, e.g., converting the digital bitmap image or skipping this step. Since claims are to be interpreted in light of the disclosure in order to clearly and distinctly determine the scope of the claimed element for infringement purposes, the full content of the specification has been reviewed for further details about the value or range of values of the claimed threshold. However, no specific information thereof has been provided so that a skilled person in the art would know what the claimed threshold is or the scope of such a threshold. Without a clear definition, either in the claim and/or in the written description, of the threshold, one of ordinary skill in the art could not ascertain the metes and bounds of the claimed threshold. The claims are thus indefinite. What if the threshold is set to such a high number that no conversion is necessary and thus there is no converting step at all and the invention is now only a one-step process which is the step of sending the analog image to the consumer device via an analog interface. In such a case then, what would be the novelty of the invention.

Accordingly, any arguments that this claimed threshold provides patentable distinction over the prior art will be unpersuasive.

Claim Rejections – 35 USC § 103

7. The following is a quotation of the 35 U.S.C. § 103(a) which form the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 11-15, 21-23, 25-26, 33-37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent Application Publication No. 02-121589 by Tesujiro in view of Japanese Patent Application Publication No. 07-313449 by Shigeru et al. (“Shigeru”).

Claim 1

Tetsujiro discloses a method of *transmitting images from a producer device to a consumer device, comprising at the producer device:*

determining that a digital bitmap image is larger in size than a size threshold (see Purpose and Constitution; it is noted that Tetsujiro's picture element data is interpreted to encompass the size of a bitmap image is made up of dots/pixels);

upon determining that the digital bitmap image is larger in size than the size threshold (see at least Purpose and Constitution; e.g., "... a threshold value is supplied to the other input of a comparator circuit 17...").

Tetsujiro does not specifically disclose the remaining steps of the claim. However, in an analogous art of image processing, Shigeru discloses:

converting the digital bitmap image to an analog image (see at least Constitution, "... and reconverted by digital analog converters 19R... into analog signals; and the analog video signals by the colors..."); and

sending the analog image to the consumer device (see at least Constitution, "... are sent to the output terminal 13 for ...").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the technique of Shigeru with that of Tetsujiro because the combined technique would improve the process of reproducing picture.

Claim 14

Claim 14 is an independent claim that recites *an electronic storage medium which, when executed on a programmed processor, carry out the method steps of Claim 1*. Therefore, Claim 14 is also rejected for the same reasons set forth in Claim 1.

Claim 15

Tetsujiro discloses *a method of transmitting images from a producer device to a consumer device, comprising at the producer device:*

determining if a digital bitmap image is larger in size than a threshold and if the digital bitmap image is larger is size than the threshold (see Purpose and Constitution; it

is noted that Tetsujiro's picture element data is interpreted to encompass the size of a bitmap image is made up of dots/pixels).

Tetsujiro does not specifically disclose the remaining steps of the claim. However, in an analogous art of image processing, Shigeru discloses:

converting the digital bitmap image to an analog image (see at least Constitution, "... and reconverted by digital analog converters 19R... into analog signals; and the analog video signals by the colors...");

sending a control message as an audio video control (AVC) command to the consumer device to switch from a digital input to an analog input to receive the analog image (see at least Constitution, "... are sent to the output terminal 13 for ...");

sending the analog image to the consumer device as an overlay on an analog television signal (see at least Shigeru, Constitution; e.g., "... and the analog video signals ... are sent to the output terminal 13).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the technique of Shigeru with that of Tetsujiro because the combined technique would improve the process of reproducing picture.

The combination Tetsujiro-Shigeru does not specifically disclose *wherein the digital images are sent using EIA775a protocol over an IEEE 1394 digital connection*.

However, as a result of the comparison stage performed in Tetsujiro, if the size of the bitmap is smaller than a preset threshold, the decision to not perform thinning could be changed to send the bitmap map image to the consumer device via digital channel using a EIA775a protocol over an IEEE 1394 digital connection. One of ordinary skill in the art would have been motivated to do so to take advantage of the fast transfer through IEEE-1394-based transmission medium and not loose any of the digital image quality.

Claim 22

Claim 22 is an independent claim that recites *an electronic storage medium storing instructions which, when executed on a programmed processor, carr[ies] out the method of Claim 15*. Therefore, Claim 22 is rejected for the same reasons set forth in Claim 15.

Claim 23

Claim 23 is an independent claim that recites a method of *transmitting images from a television set-top box to a digital television, comprising at the set-top box* (see at least p. 5; section 2.1, 1st ¶; p. 62, sections A.1.B & A.1.C) the same method steps of Claim 15. Therefore, Claim 23 is rejected for the same reasons as set forth in Claim 15.

Claim 26

Tetsujiro discloses *a producer device* (e.g., device that produce input signals to the Tetsujiro's comparator) comprising:

means for receiving digital content containing a bitmap image (see at least Constitution, two picture element data (a) and (b));

means for determining a size of the bitmap image (see Purpose and Constitution; it is noted that Tetsujiro's picture element data is interpreted to encompass the size of a bitmap image which is commonly known to be made up of dots/pixels).

Tetsujiro does not specifically disclose the remaining steps of the claim. However, in an analogous art of image processing, Shigeru discloses:

means for converting the bitmap image to an analog representation in the event the size of the bitmap image exceeds a threshold (see at least Constitution, "... and reconverted by digital analog converters 19R... into analog signals; and the analog video signals by the colors..."); *and*

an analog output circuit for sending the analog representation to the consumer device (see at least Constitution, "... are sent to the output terminal 13 for ...").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the technique of Shigeru with that of Tetsujiro because the combined technique would improve Tetsujiro's process of reproducing picture.

Tetsujiro does not specifically disclose *a digital output circuit for sending digital information to a consumer device*. However, as a result of the comparison stage performed in Tetsujiro, if the size of the bitmap is smaller than a preset threshold, the decision to not perform thinning could be changed to send the bitmap map image to the consumer device via digital

channel. One of ordinary skill in the art would have been motivated to do so to take advantage of the fast transfer through IEEE-1394-based transmission medium and not lose any of the digital image quality.

Claims 11 and 33

Rejections of base claims 1 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose *sending digital bitmap images to a digital input in the consumer device when the digital bitmap images are smaller than the threshold*.

However, as a result of the comparison stage performed in Tetsujiro, if the size of the bitmap is smaller than a preset threshold, the decision to not perform thinning could be changed to send the bitmap map image to the consumer device via digital channel. One of ordinary skill in the art would have been motivated to do so to take advantage of the fast transfer through IEEE-1394-based transmission medium and not lose any of the digital image quality.

Claims 12 and 34

Rejections of base claims 1 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose *wherein the digital images are sent using EIA775a protocol over an IEEE 1394 digital connection*. However, as a result of the comparison stage performed in Tetsujiro, if the size of the bitmap is smaller than a preset threshold, the decision to not perform thinning could be changed to send the bitmap map image to the consumer device via digital channel using a EIA775a protocol over an IEEE 1394 digital connection. One of ordinary skill in the art would have been motivated to do so to take advantage of the fast transfer through IEEE-1394-based transmission medium and not lose any of the digital image quality.

Claims 13, 21, 25 and 35

Rejections of base claims 1, 15, 23 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru further discloses *wherein the analog image is sent as one of an NTSC and PAL format analog image* (see at least Shigeru, Constitution; e.g., "... and the analog video signals ... are sent to the output terminal 13).

Claim 36

The rejection of base claim 26 is incorporated. Tetsujiro further discloses *wherein the means for determining the size comprises a programmed processor* (see at least Consitution, e.g., the comparator circuit 17).

Claim 37

Since Claim 37 is an independent claim that recites the same features of Claim 1, the same rejection is thus applied. Claim 37 further recites *wherein the threshold is established as approximately a bitmap image size that results in visibly noticeable delays in displaying the bitmap image if the bitmap image is delivered via a digital interface from the producer device*. Official notice is taken that this feature is known in the art (see Applicant's background at page 2, lines 9-10).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use this feature in the combination Tetsujiro-Shigeru because the use of this feature would improve the combination by detecting when to send the analog image to a consumer device via an analog interface rather than sending the digital bitmap image to a consumer device via a digital interface.

9. Claims 2-10, 16-20, 24, 27-32 and 38-41 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent Application Publication No. 02-121589 by Tetsujiro in view of Japanese Patent Application Publication No. 07-313449 by Shigeru et al. ("Shigeru") and further in view of Draft EIA-775A, DTV 1394 Interface Specification ("775A-1394 Interface").

Claims 2, 27 and 38

Rejections of base claims 1 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, 775A-1394 Interface discloses *sending a control message to the consumer device to switch from a digital input to an analog input to receive the analog image* (see at least p. 49, 2nd & 3rd ¶¶s).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the 775A-1394 standard to send a control message to the consumer device to switch from a digital input to an analog input to receive the analog image as specified by the 775A-1394 standard. One of ordinary skill in the art would have been motivated to use such a standard for sending a control message (as suggested in Tetsujiro as transmitting a control code – see Purpose in Tetsujiro) to the consumer device in order to improve the process of reproducing pictures (see Purpose in Tetsujiro).

Claims 3, 16 and 39

Rejections of base claims 1 and 15, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, 775A-1394 Interface discloses *sending a control message to the consumer device to switch from the analog input back to the digital input to receive digital images after the analog image has been sent* (see at least sections 3.3; 4.11; 5, e.g., – introduction--; 5.10.3; 6.1-2; 9, e.g., 9.3.4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the 775A-1394 standard to send a control message to the consumer device to switch from the analog input back to the digital input to receive digital images after the analog image has been sent, as specified by the 775A-1394 standard. One of ordinary skill in the art would have been motivated to use such a standard for sending a control message (as suggested in Tetsujiro as transmitting a control code – see Purpose in Tetsujiro) to the consumer device in order to improve the process of reproducing pictures (see Purpose in Tetsujiro).

Claims 4 and 28

Rejections of base claims 1 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, 775A-1394 Interface discloses *wherein the digital input comprises an IEEE 1394 digital input* (see at least section 1, e.g., Introduction & FIG. 3, e.g., Input to Image Buffer & Control, DTV CPU & Application, SDTV & HDTV MPEG Decode).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use IEE-1394 digital input in the combination Tetsujiro-Shigeru because the digital bitmap image could then be evaluated by the combined technique in order to improve the process of reproducing pictures (see Purpose in Tetsujiro).

Claims 5, 6 and 29

Rejections of base claims 1 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, 775A-1394 Interface discloses *wherein the control message comprises an audio video control (AVC) command* (see at least sections 5.9-10; 6).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the IEEE-1394 digital standard in the combination Tetsujiro-Shigeru because this would allow audio-video control commands to be sent to the consumer device.

Claims 7, 17 and 41

Rejections of base claims 1 and 15, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, the 775A-1394 Interface discloses *wherein the digital bitmap image comprises a graphical user interface (GUI) image* (see at least section 3.2).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the GUI image as taught in the IEEE-1394 standard in the combination Tetsujiro-Shigeru because this would allow a user to set parameters such as threshold values of control functions.

Claims 8 and 18

Rejections of base claims 1 and 15, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, the 775A-1394 Interface discloses *wherein the digital bitmap image comprises a television program guide image* (see at least section 3.2; p. 33, 4th ¶).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the 775A-1394 Interface standard in the combination Tetsujiro-Shigeru because this would allow the combination to be used in a television environment.

Claims 9, 19 and 31

Rejections of base claims 1, 15 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, the 775A-1394 Interface discloses *wherein the consumer device comprises a digital television* (see at least FIG. 3, e.g., DTV receiver).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the 775A-1394 Interface standard in the combination Tetsujiro-Shigeru because this would allow the combination to be used in a digital television environment.

Claims 10, 20 and 32

Rejections of base claims 1, 15 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, the 775A-1394 Interface discloses *wherein the producer device comprises a television set-top box* (see at least p. 6, 1st ¶).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the 775A-1394 Interface standard in the combination Tetsujiro-Shigeru because this would allow the combination to be used in a television environment.

Claims 24 and 30

Rejections of base claims 23 and 26, respectively, are incorporated. These claims recite the same limitations of the combined Claim 17 and 18. Therefore Claims 24 and 30 are also rejected for the same reasons set forth in these claims.

Claim 40

Since Claim 40 recites the same limitations of Claims 4 and 6, the same rejections are thus applied.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hoang-Vu A. Nguyen-Ba whose telephone number is (571) 272-3701. The Examiner can normally be reached on Tuesday -Friday from 7:00 – 17:30.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, John Miller can be reached at (571) 272-7353.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2600 Group receptionist: 571-272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hoang-Vu Antony Nguyen-Ba/
Primary Examiner, Art Unit 2623

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